

## CLAIMS

What is claimed is:

- 5 1. A method to enable a wireless device to discover Internet businesses or services by  
accessing the Universal Description, Discovery and Integration (UDDI) registry,  
comprising:
  - (a) forming a query to the UDDI registry on the wireless device;
  - (b) establishing a geographical location for the wireless device; and
  - (c) appending the geographical location to a service discovery request so that  
responses to the query are dependent on the established geographical location.
- 10 2. The method of claim 1, wherein the method is embodied as programmed instructions  
executed within the user's wireless device to query the UDDI registry.
- 15 3. The method of claim 1, wherein the method is embodied as programmed instructions  
executed within a separate knowledge engine server to query the UDDI registry in  
response to commands from the user's wireless device.
- 20 4. The method of claim 1, wherein establishing the geographical location of a wireless  
device includes a Global Positioning System (GPS) coordinate.

5. The method of claim1, wherein establishing the geographical location of a wireless  
device utilizes Mobile-Based Enhanced Observed Time Difference

6. The method of claim1, wherein establishing the geographical location of a wireless  
device includes map information services/databases.

5

7. The method of claim1, wherein establishing the geographical location of a wireless  
device utilizes a gateway mobile location center.

8. The method of claim1, wherein establishing the geographical location of a wireless  
device includes a cellular ID.

9. The method of claim 1, wherein the server caches files accessed from web sites, for  
selective forwarding to the user's wireless device.

15

10. A method to enable a wireless device to discover Internet businesses or services by  
accessing the Universal Description, Discovery and Integration (UDDI) registry,  
comprising:

20 (a) entering a location handle that will be associated with a geographic location of  
the wireless device;

(b) receiving location data and linking the location data to the location handle;

(c) entering at least one query term;

5

- (d) sending a *find\_business* XML inquiry to the UDDI registry in response to the entered query terms with appended location data; and
- (e) receiving back from the UDDI registry, a *businessList* message that contains a list of business names satisfying the *find\_business* query and location data.

11. The method of claim 10, which further comprises:

- (a) selecting an item from the returned *businessList* message;
- (b) drilling down in the selected business' entity data;
- (c) sending a *find\_service* XML inquiry to the UDDI registry;
- (d) receiving back from the UDDI registry, a *serviceList* message that contains a list of names of services offered by the selected business in the geographical location.

12. The method of claim 11, which further comprises:

15

- (a) selecting an item from the returned *serviceList* message;
- (b) drilling down in the selected service data;
- (c) sending a *\_get\_serviceDetail\_* XML inquiry to the UDDI registry;
- (d) receiving back from the UDDI registry, a *serviceDetail* message that includes bindingTemplate data that contains the details of the selected service.

20

13. The method of claim 12, which further comprises:

including in the *bindingTemplate* data an *accessPoint URL*, which is the URL of the selected service on the web site of the selected business.

14. The method of claim 13, which further comprises displaying the *accessPoint* URL to  
the user.

5 15. The method of claim 10, wherein the location data includes a Global Positioning  
System (GPS) coordinate.

16. The method of claim 10, wherein the location data utilizes Mobile-Based Enhanced  
Observed Time Difference

10 17. The method of claim 10, wherein the location data includes map information  
services/databases.

15 18. The method of claim 10, wherein the location data utilizes data from a gateway  
mobile location center.

19. The method of claim 10, wherein the location data includes a cellular ID.

20. The method of claim 13, which further comprises:

20 (a) storing the location handle in a user profile with the location data;  
(b) providing the user with a shortcut for appending location data, in response to  
the user's entry of abbreviated location handle to the wireless device.

21. The method of claim 10, which further comprises pasting a user location into the at least one query term search by pressing a hotkey button connected to the wireless device.

5

22. The method of claim 10, wherein the location data is updated in accordance with the geographic location of the wireless device.

23. The method of claim 22, which further comprises storing the at least one query term and identifying the stored term with a search handle.

24. The method of claim 23, wherein the search handle may be replayed by the user using abbreviated means, wherein the replay of the search handle is appended with updated geographical location data.

15

25. A method to enable a wireless device to discover Internet businesses or services by accessing the Universal Description, Discovery and Integration (UDDI) registry, comprising:

- (a) entering a search handle in the wireless device that will be associated with the user's search strategy;
- (b) entering a location handle that will be associated with the user's location;
- (c) entering query terms in the wireless device as at least part of a business name;

20

5

- (d) transmitting the search handle, location handle and query terms to a knowledge engine server;
- (e) searching web sites using URLs contained in stored binding templates;
- (f) retrieving documents resulting from the search of the web sites; and
- (g) applying a location filter prescribed by the user and stored in the user's profile, to limit the returned documents to only those of particular interest or location to the user.

26. The method of claim 25, which further comprises sorting the documents in a list having an order established in accordance with user's profile or location.

27. The method of claim 26, which further comprises storing the filtered documents and the sorted list in a cache for later, selective accessing by the user.

15 28. The method of claim 27, which further comprises receiving the user's selections from the list and updating the user's profile with the user's preferences or location.

20 29. The method of claim 28, which further comprises associating the search handle with user's selections and with the user's search strategy; storing that association in user's profile.

30. The method of claim 29, which further comprises providing the user with a shortcut for accessing pages from web sites, in response to the user's entry of abbreviated search handle to the wireless device.

5 31. A system to enable a wireless device to discover Internet businesses or services by accessing the Universal Description, Discovery and Integration (UDDI) registry, comprising:

a processor;  
a memory coupled to the processor, programmed to perform the steps of:  
forming a query to the UDDI registry on the wireless device;  
establishing a geographical location for the wireless device; and  
appending the geographical location to a service discovery request so that responses to the query are dependent on the established geographical location.

15 32. A system to enable a wireless device to discover Internet businesses or services by accessing the Universal Description, Discovery and Integration (UDDI) registry, comprising:

a processor;  
a memory coupled to the processor, programmed to perform the steps of:  
20 entering a location handle that will be associated with a geographic location of the wireless device;  
receiving location data and linking the location data to the location handle;  
entering at least one query term;

sending a *find\_business* XML inquiry to the UDDI registry in response to the entered query terms with appended location data; and receiving back from the UDDI registry, a *businessList* message that contains a list of business names satisfying the *find\_business* query and location data.

5

33. A system to enable a wireless device to discover Internet businesses or services by accessing the Universal Description, Discovery and Integration (UDDI) registry, comprising:  
a processor;  
a memory coupled to the processor, programmed to perform the steps of:  
entering a search handle in a wireless device that will be associated with the user's search strategy;  
entering a location handle that will be associated with the user's location;  
entering query terms in the wireless device as at least part of a business name;  
transmitting the search handle, location handle and query terms to a knowledge engine server;  
searching web sites using URLs contained in stored binding templates;  
retrieving documents resulting from the search of the web sites; and  
applying a location filter prescribed by the user and stored in the user's profile, to limit the returned documents to only those of particular interest or location to the user.

20

34. A system to enable a wireless device to discover Internet businesses or services by accessing the Universal Description, Discovery and Integration (UDDI) registry, comprising:

5

a processor;

a hotkey switch;

a memory coupled to the processor, programmed to perform the steps of:

10  
entering a location handle that will be associated with a geographic location of the wireless device, wherein the geographical location is further associated with the hotkey switch;

15  
receiving location data and linking the location data to the location handle and hotkey switch;

entering at least one query term;

20  
appending geographical location to the query through the activation of the hotkey switch;

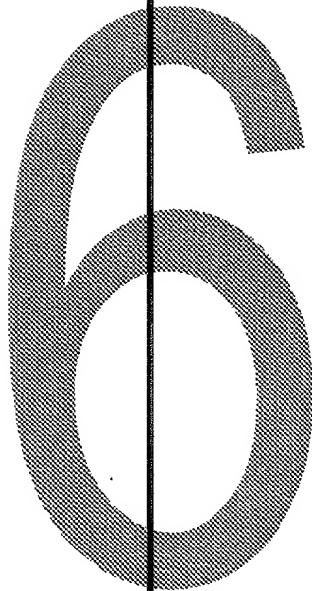
25  
sending a *find\_business* XML inquiry to the UDDI registry in response to the entered query terms with appended location data; and

30  
receiving back from the UDDI registry, a *businessList* message that contains a list of business names satisfying the *find\_business* query and location data.

UNITED STATES PATENT AND TRADEMARK OFFICE  
DOCUMENT CLASSIFICATION BARCODE SHEET



# Abstract



Level - 2  
Version 1.1

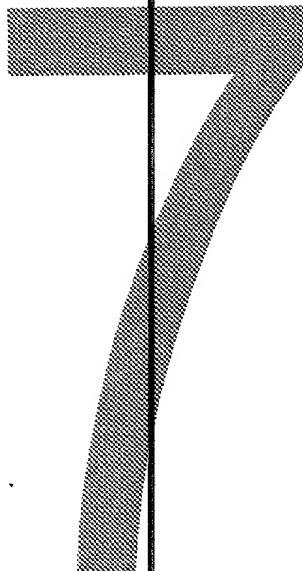
**ABSTRACT**

A system and method is disclosed to enable a mobile phone or wireless PDA to discover Internet businesses and services by accessing the Universal Description, Discovery and 5 Integration (UDDI) registry using a user's location or coordinates. The method facilitates the formation of a query to the UDDI registry for the wireless device user. The method obtains a location for the user. The method constructs a personal user profile of the user's UDDI searching strategies, locations and Internet accessing preferences. The user profile can be used as a shortcut for online or offline queries to the UDDI registry or for accessing pages from web sites, or updating location information in response to the user's entry of abbreviated inputs to the wireless device. The method is embodied as programmed instructions which may be executed within the user's wireless device to query the UDDI registry. Alternately, method is embodied as programmed instructions which may be executed within a separate knowledge engine server to query the UDDI registry in response to commands from the user's wireless device. The server 15 can be used to cache files accessed from web sites, for selective forwarding to the user's wireless device.

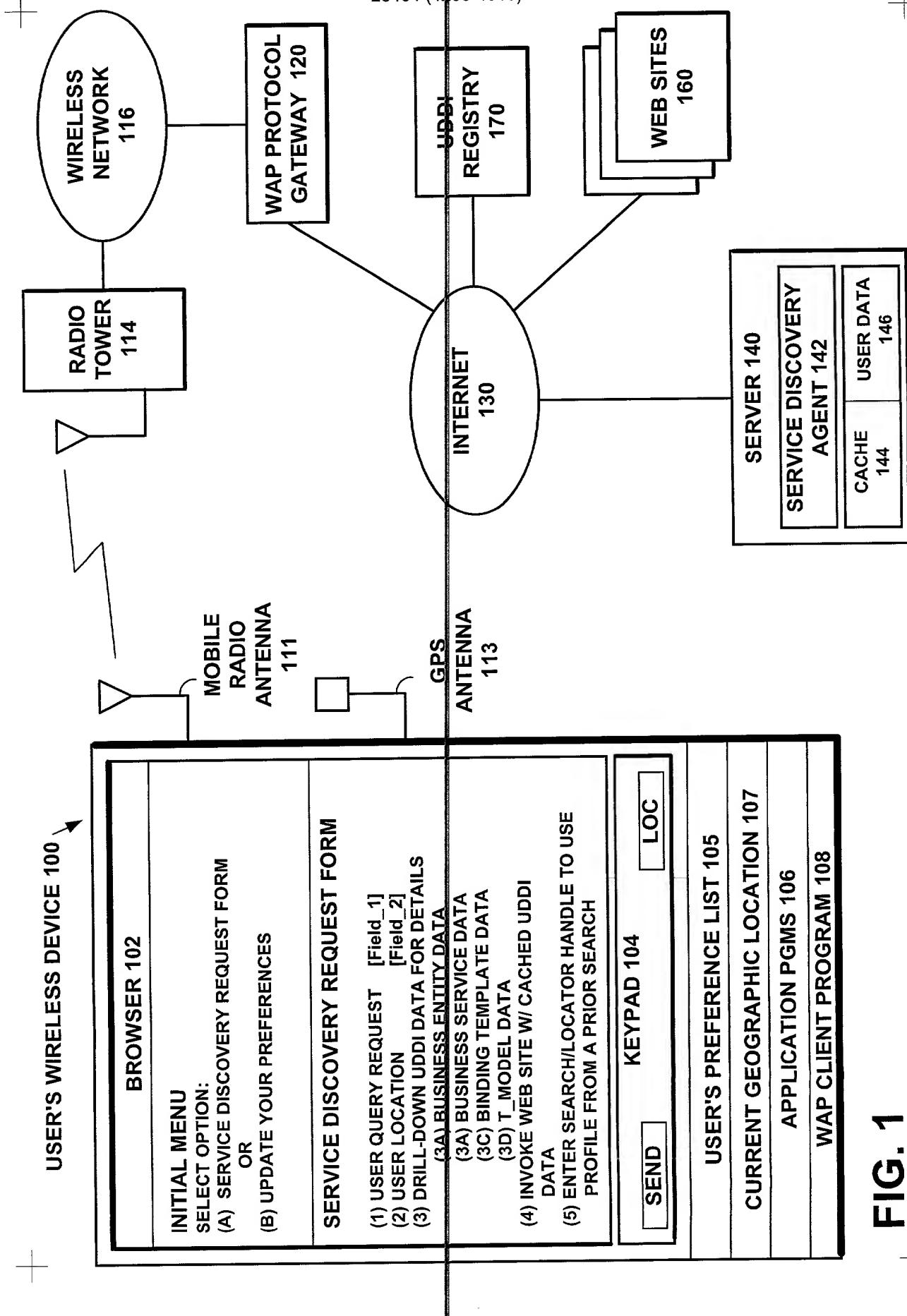
UNITED STATES PATENT AND TRADEMARK OFFICE  
DOCUMENT CLASSIFICATION BARCODE SHEET



# Drawings



Level - 2  
Version 1.1



JUHANI MURTO AND MIKKO OLKKONEN  
SERVICE DISCOVERY ACCESS TO USER LOCATION  
28464 (4208-4010)

USER'S WIRELESS  
DEVICE 100

BROWSER 102

AUTODETECT GPS CAPABILITY  
[GPS ENABLED]  
AUTODETECT MOBILE LOCATION  
[N/A]

AUTODETECT LOCATION? Y/N " \_N\_"  
ENTER LOCATOR TOLERANCE:  
[1-50] [M/KM]

ENTER DEFAULT USER LOCATION:  
"HOME/\_WORK"

ENTER LOCATION :

- [1] "STREET\_ADDRESS"
- [2] "CITY\_OR\_PROVENCE"
- [3] "COUNTRY"
- [4] "ZIP\_OR\_MAIL\_CODE"
- [5] "TELEPHONE/\_AREA\_CODE"

USER PREFERENCE LIST 105

USER LOCATION 107

APPLICATION PROGRAMS 106

WAP CLIENT PROGRAM 108

**FIG. 1A**

**FIG. 1B**

JUHANI MURTO AND MIKKO OLKKONEN  
SERVICE DISCOVERY ACCESS TO USER LOCATION  
28464 (4208-4010)

USER'S WIRELESS  
DEVICE 100

BROWSER 102

MOBILE WEB SERVICES  
BROWSE UDDI REGISTRY FOR WEB SITE URLs  
BASED ON LOCATION

ENTER LOCATION HANDLE: " \_DC\_TRIP\_ "  
AUTO-UPDATE ENABLE? Y/N: "Y"

ENTER SEARCH HANDLE: " \_RESTAURANT\_ "

ENTER FIRST TERM: " \_MIDDLE\_EAST\_ "  
IS THIS A BUSINESS? Y/N " Y "  
IS THIS A SERVICE? Y/N " \_N\_ "

ENTER SECOND TERM: " \_KABOB\_ "

IS THIS A BUSINESS? Y/N " Y "

IS THIS A SERVICE? Y/N " \_N\_ "

SEND " find\_business "

XML INQUIRY WITH SOAP PROTOCOL

SEND

KEYPAD 104

LOC

USER PREFERENCE LIST 105

USER LOCATION 107

APPLICATION PROGRAMS 106

WAP CLIENT PROGRAM 108

USER'S WIRELESS  
DEVICE 100

BROWSER 102

MOBILE WEB SERVICES  
RESULTS FROM BROWSING UDDI  
REGISTRY UNDER LOCATION HANDLE  
" \_DC\_TRIP\_ " AND SEARCH HANDLE  
" \_RESTAURANT\_ "

RETURNED businessList MESSAGE:

- (1) MIDDLE EASTERN DINING IN DC
- (2) HOUSE OF KABOB
- (3) KABOB PALACE
- (4) KABOB EMPORIUM

CHECK LOCATION AUTO-UPDATE  
SELECT ITEM FROM RETURNED LIST  
OR  
CONTINUE BROWSING

SEND

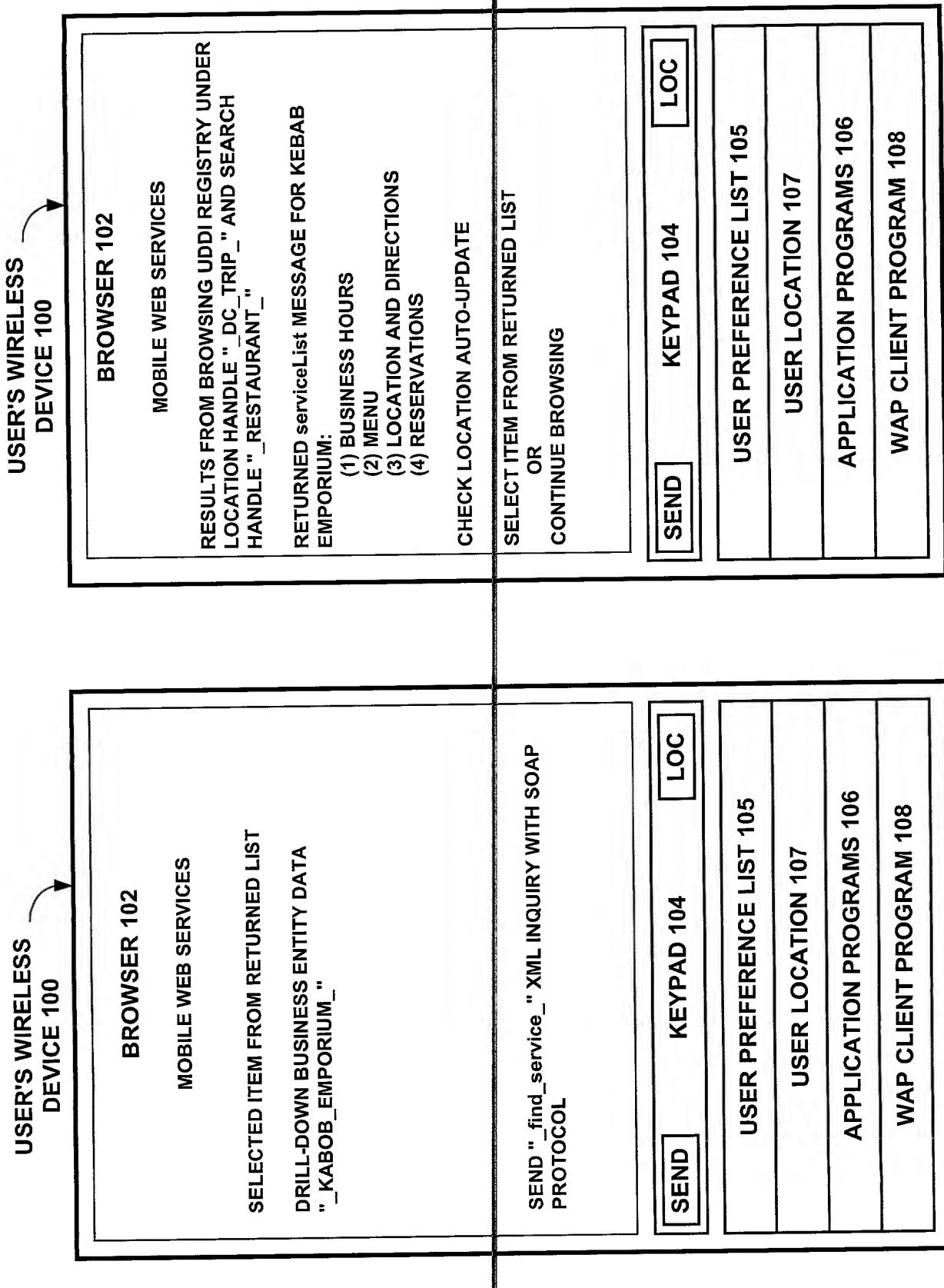
KEYPAD 104

LOC

FIG. 1C

FIG. 1D

JUHANI MURTO AND MIKKO OLKKONEN  
SERVICE DISCOVERY ACCESS TO USER LOCATION  
28464 (4208-4010)



**FIG. 1E**

**FIG. 1F**

JUHANI MURTO AND MIKKO OLKKONEN  
SERVICE DISCOVERY ACCESS TO USER LOCATION  
28464 (4208-4010)

USER'S WIRELESS  
DEVICE 100

**BROWSER 102**

MOBILE WEB SERVICES  
RESULTS FROM BROWSING UDDI REGISTRY  
UNDER LOCATION HANDLE "DC\_TRIP" AND  
SEARCH HANDLE "\_RESTAURANTS\_".

RETURNED serviceDetail MESSAGE FOR  
"MENU".

- (1) BREAKFAST
- (2) LUNCH
- (3) DINNER
- (4) CURRENT SPECIALS

SELECT ITEM FROM RETURNED LIST

OR

CONTINUE BROWSING

**SEND** **KEYPAD 104** **LOC**

**USER PREFERENCE LIST 105**

USER LOCATION 107

APPLICATION PROGRAMS 106

WAP CLIENT PROGRAM 108

USER'S WIRELESS  
DEVICE 100

**BROWSER 102**

MOBILE WEB SERVICES

SELECT ITEM FROM RETURNED LIST

DRILL-DOWN BUSINESS SERVICE DATA  
"MENU".

SEND "get\_serviceDetail"  
XML INQUIRY WITH SOAP  
PROTOCOL

**SEND** **KEYPAD 104** **LOC**

**USER PREFERENCE LIST 105**

USER LOCATION 107

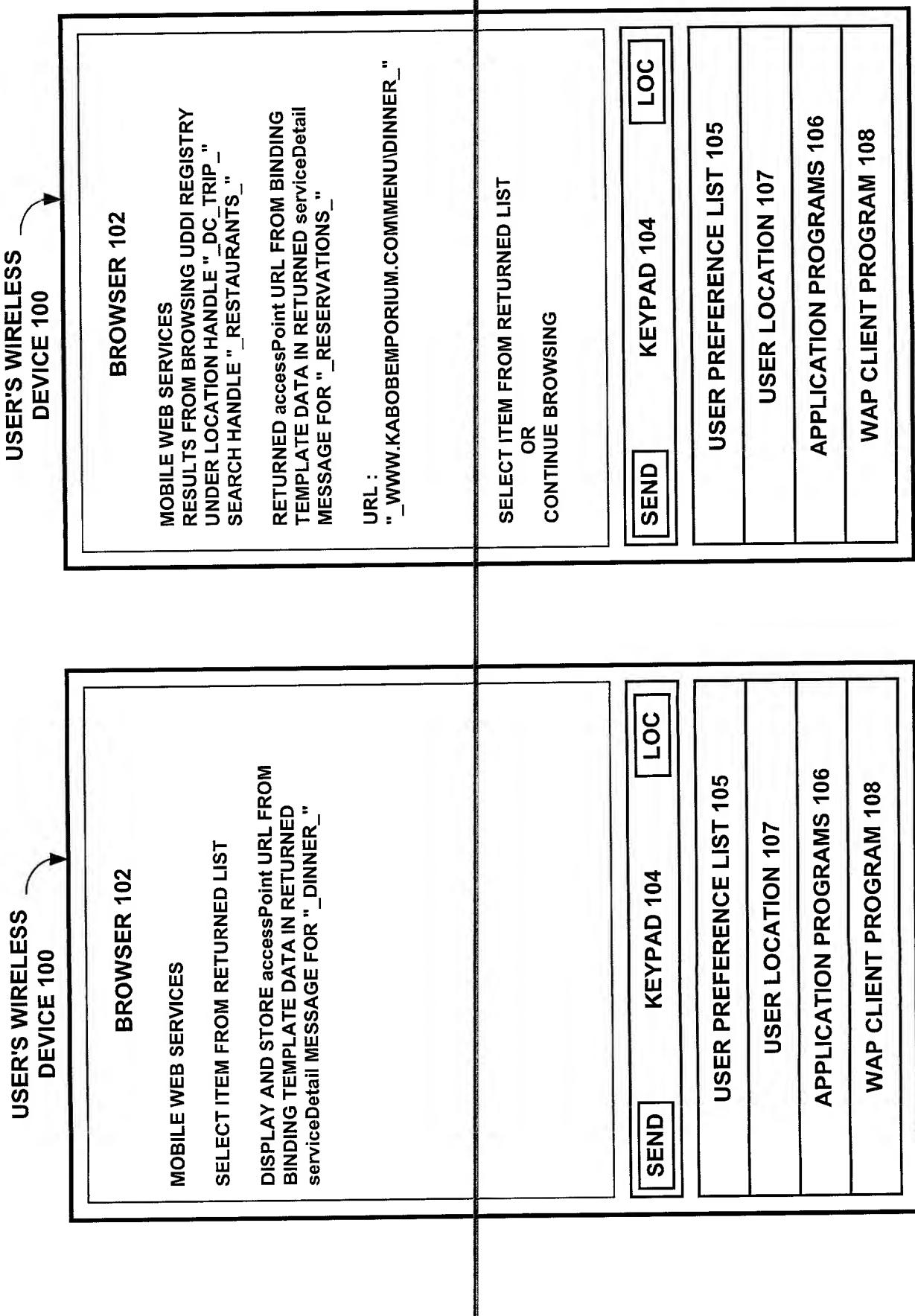
APPLICATION PROGRAMS 106

WAP CLIENT PROGRAM 108

**FIG. 1G**

**FIG. 1H**

JUHANI MURTO AND MIKKO OLKKONEN  
 SERVICE DISCOVERY ACCESS TO USER LOCATION  
 28464 (4208-4010)



**FIG. 1J**

**FIG. 1I**

USER'S WIRELESS  
 DEVICE 100

BROWSER 102

MOBILE WEB SERVICES  
 ENTER LOCATION OR SEARCH HANDLE TO USE  
 PROFILE FROM A PRIOR SEARCH  
 ENTER LOCATION HANDLE: "DC\_TRIP"  
 ENTER SEARCH HANDLE: "\_RESTAURANTS\_"  
 SELECT TYPE OF SEARCH:  
 (1) GET WEB PAGES FROM WEB SITE  
 (2) REPLAY UDDI REGISTRY SEARCH STRATEGY

BROWSER 102

MOBILE WEB SERVICES  
 RESULTS FROM REPLAYING UDDI SEARCH  
 UNDER LOCATION HANDLE "DC\_TRIP" AND  
 SEARCH HANDLE "\_RESTAURANTS\_"  
 RETURNED accessPoint URL FROM BINDING  
 TEMPLATE DATA IN RETURNED serviceDetail  
 MESSAGE FOR "\_DINNER\_"

URLS:  
 "WWW.KEBABEMPORIUM.COM\RSVP\DIINNER"  
 "WWW.KEBABEMPORIUM.COM\SPECIAL\SDINNER"  
 "WWW.KEBABEMPORIUM.COM\MENU\DIINNER"

SELECT ITEM FROM RETURNED LIST  
 OR  
 CONTINUE BROWSING

SEND  LOC

USER PREFERENCE LIST 105  
 USER LOCATION 107  
 APPLICATION PROGRAMS 106  
 WAP CLIENT PROGRAM 108

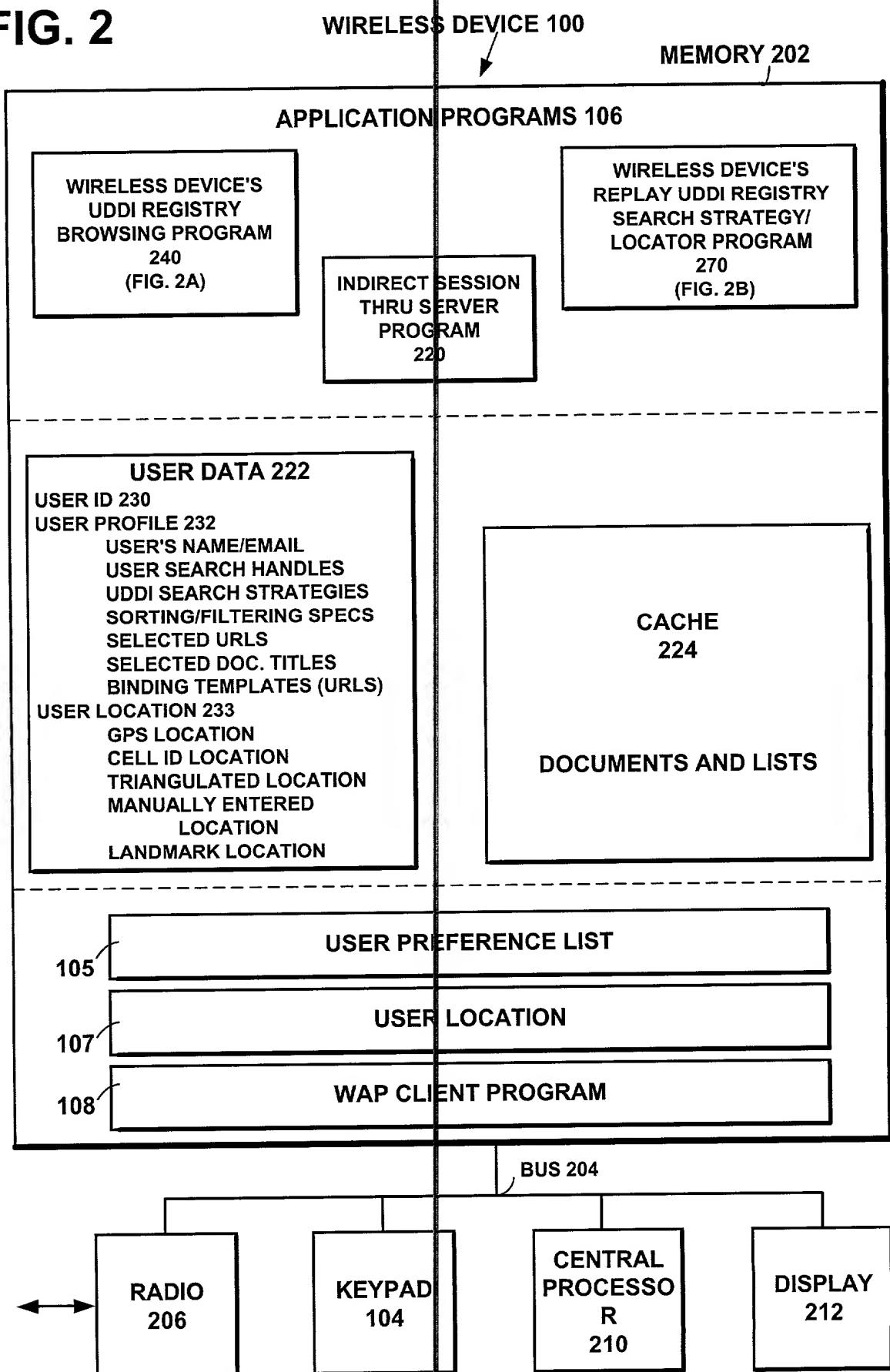
SEND  LOC

USER PREFERENCE LIST 105  
 USER LOCATION 107  
 APPLICATION PROGRAMS 106  
 WAP CLIENT PROGRAM 108

FIG. 1K

FIG. 1L

FIG. 2



**FIG. 2A**

WIRELESS  
 DEVICE'S  
 UDDI  
 REGISTRY  
 BROWSING  
 PROGRAM  
 240

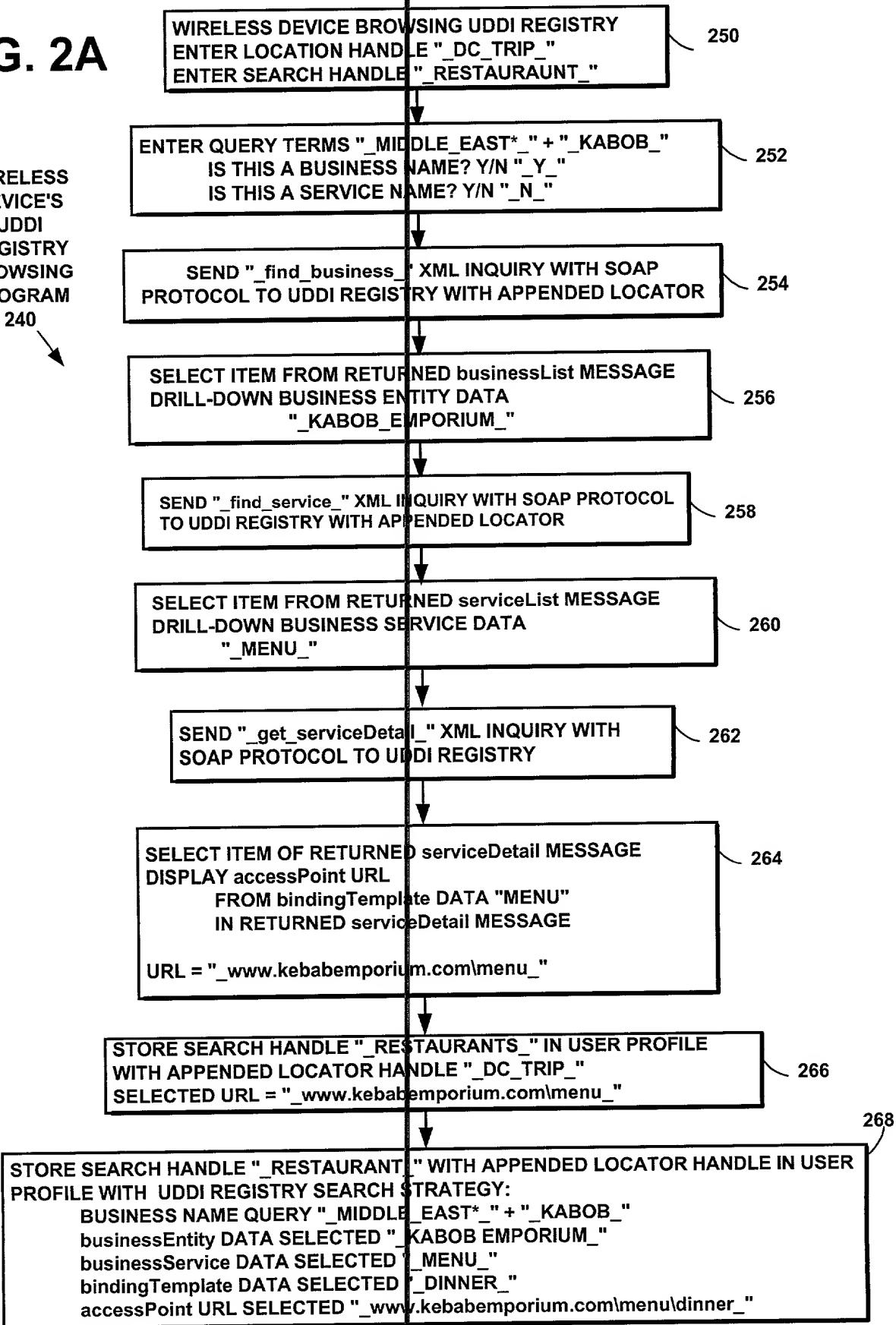
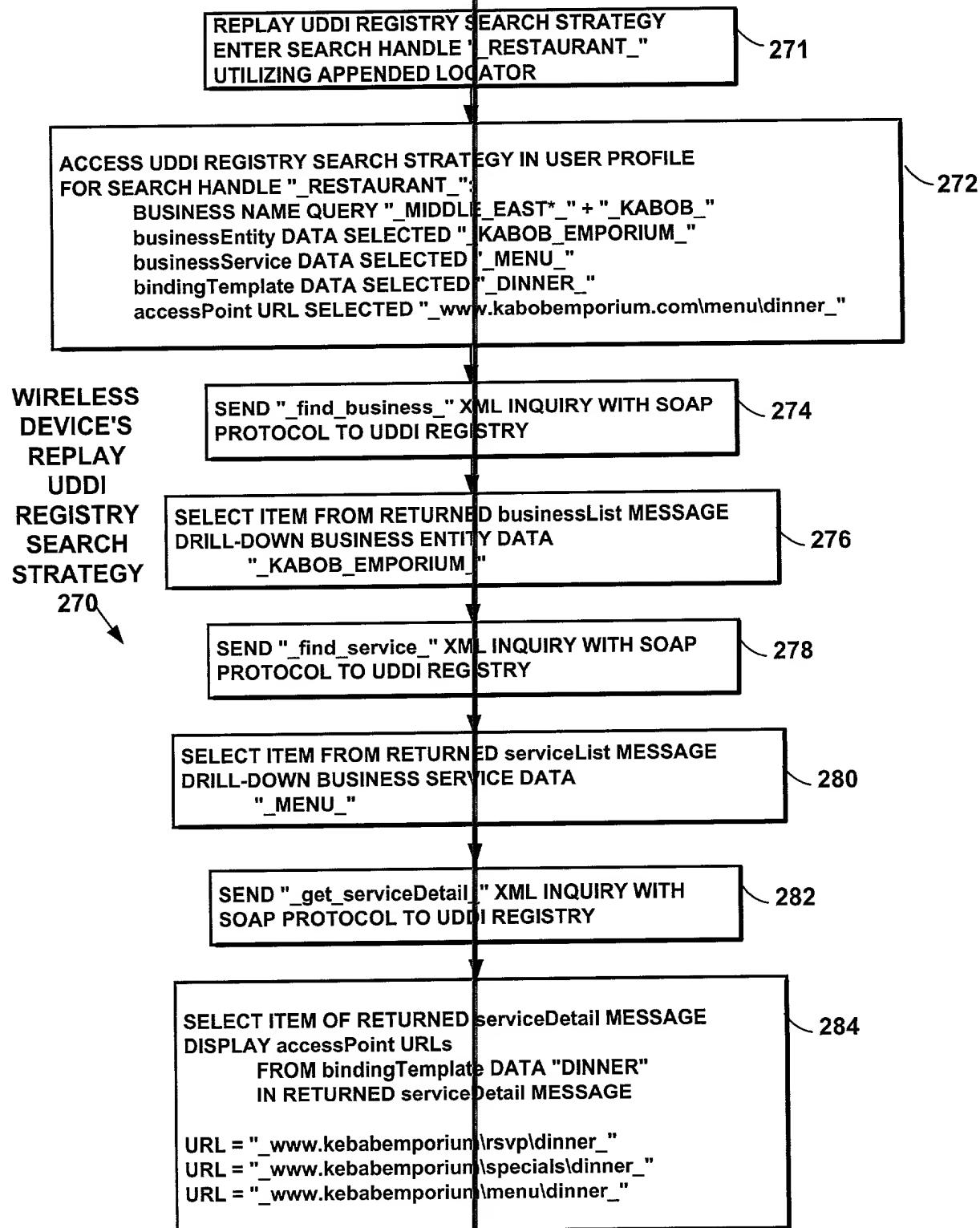
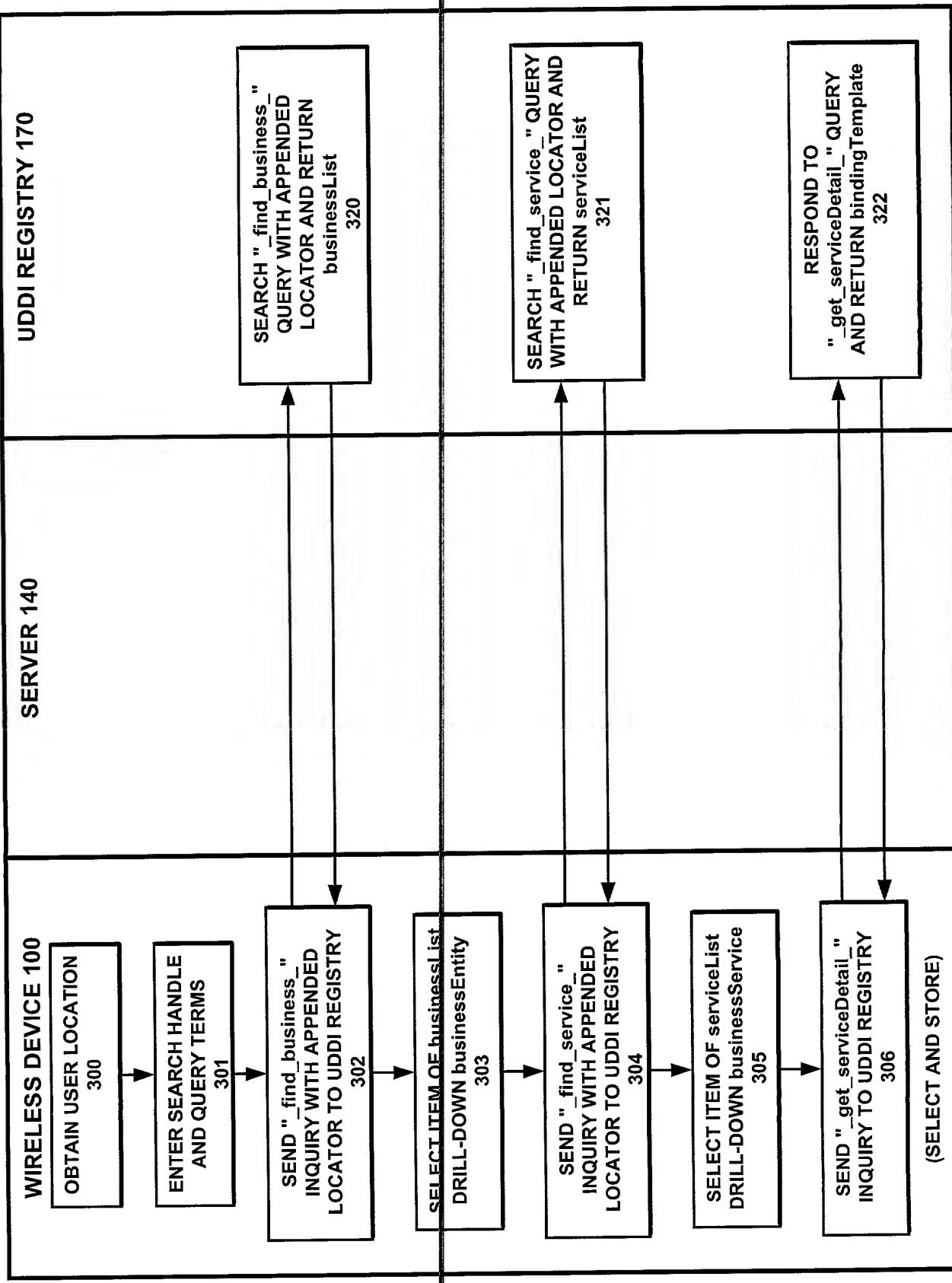


FIG. 2B



**FIG. 3A**



**FIG. 3B**

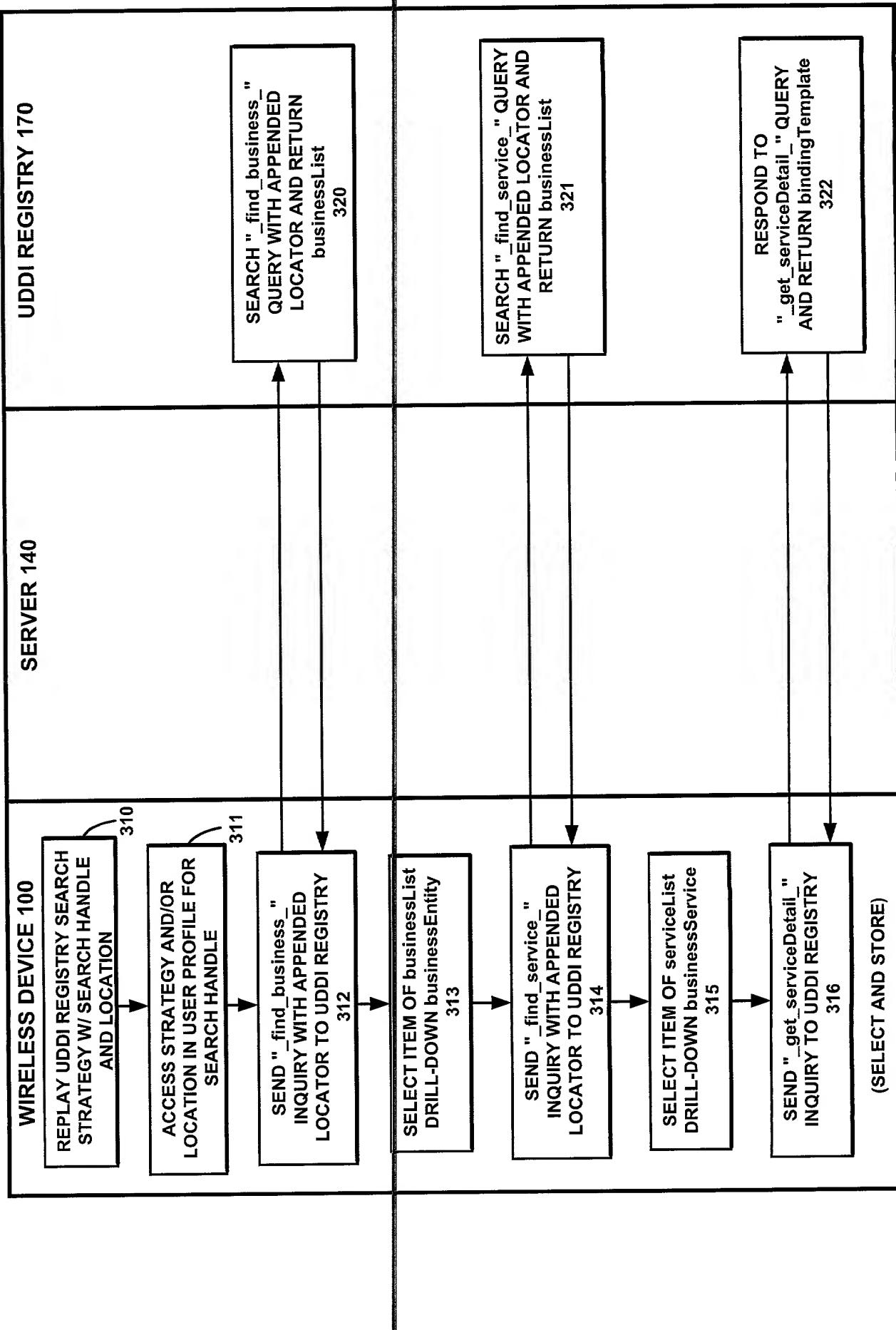


FIG. 4

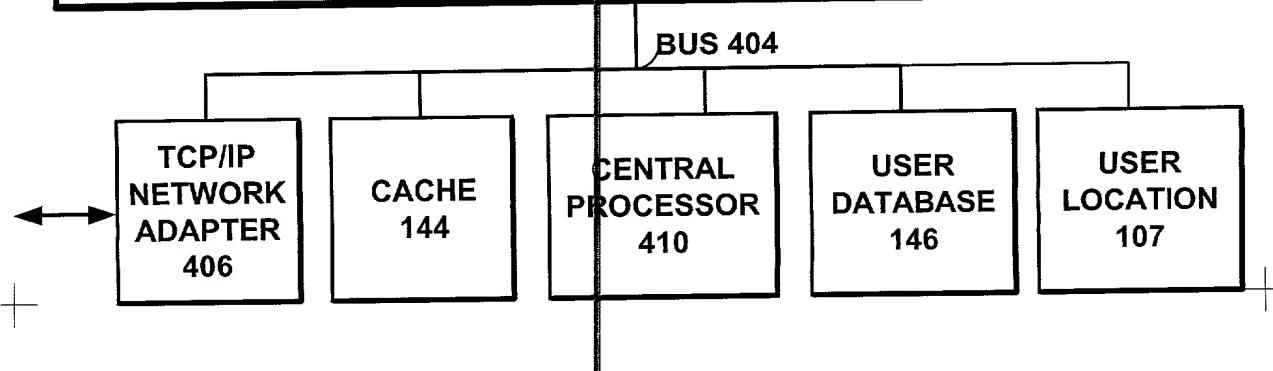
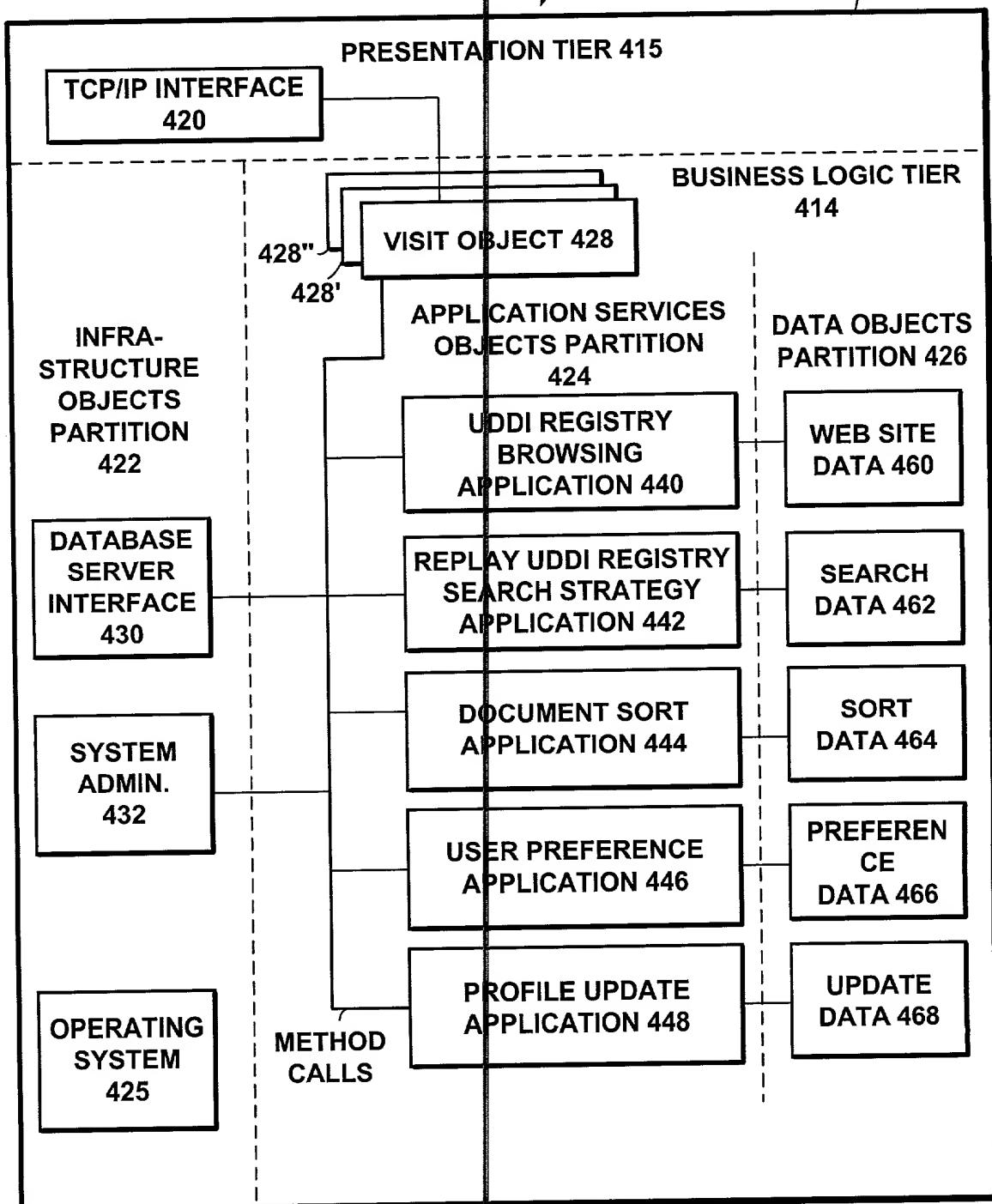
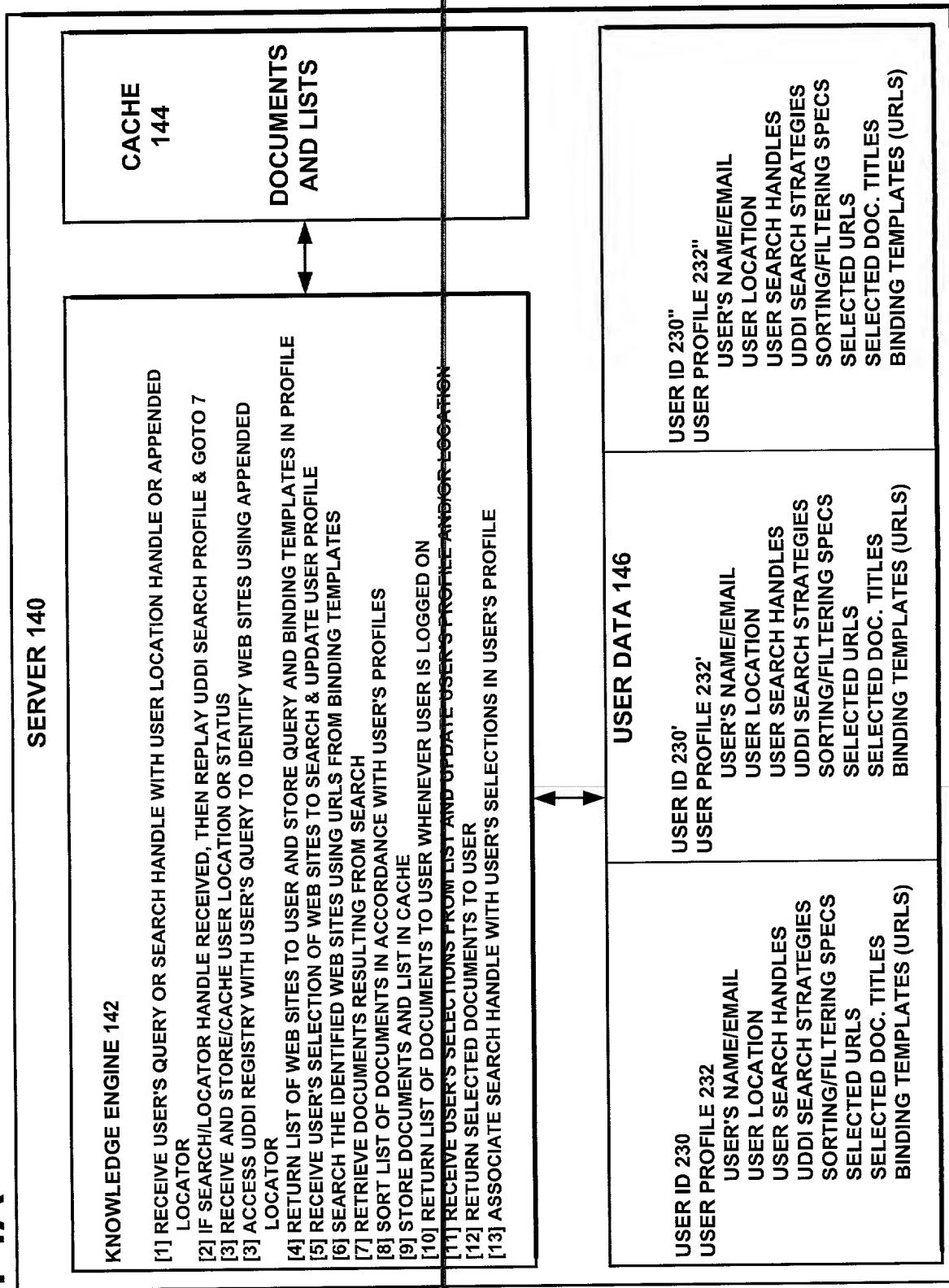
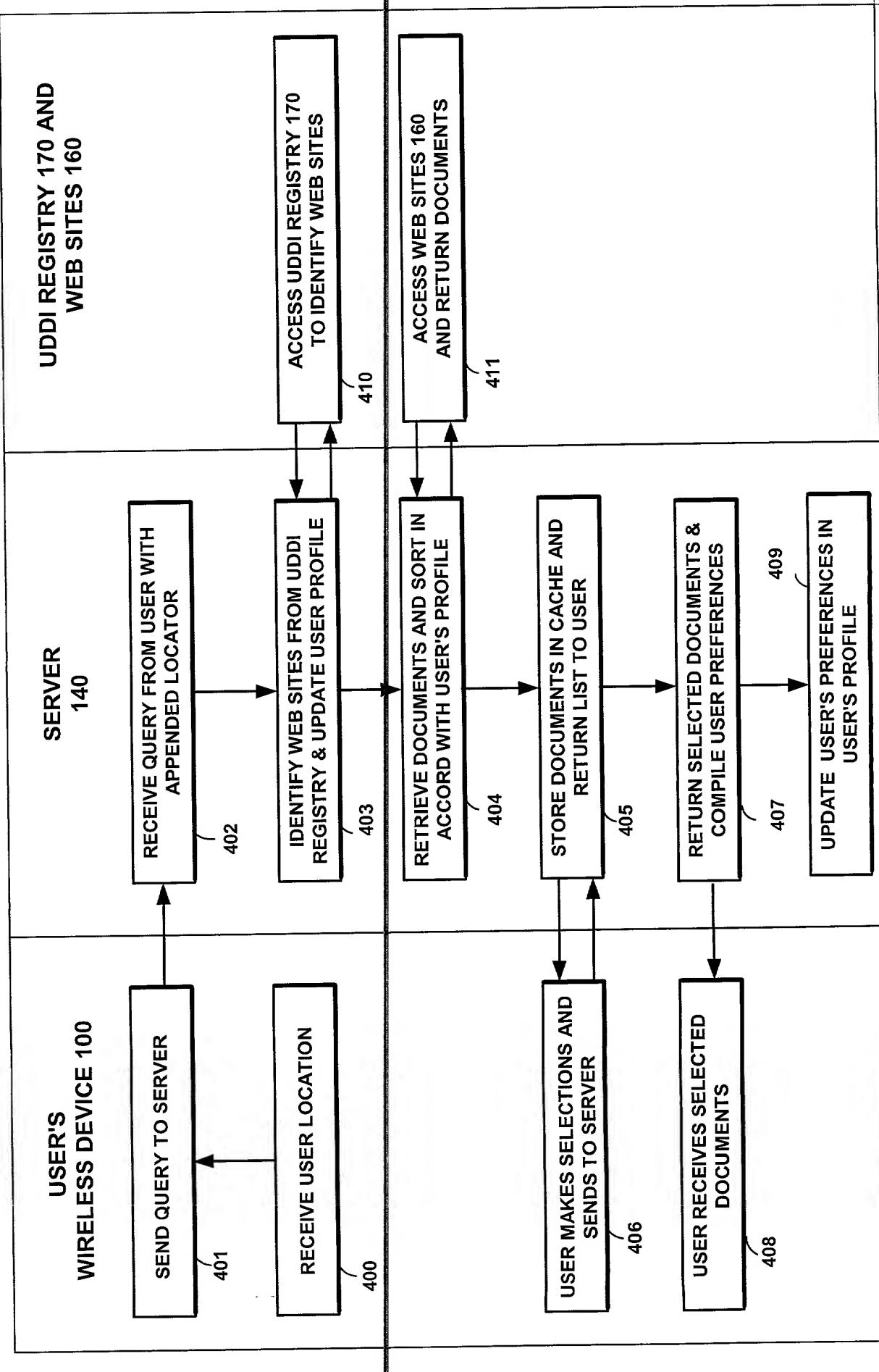
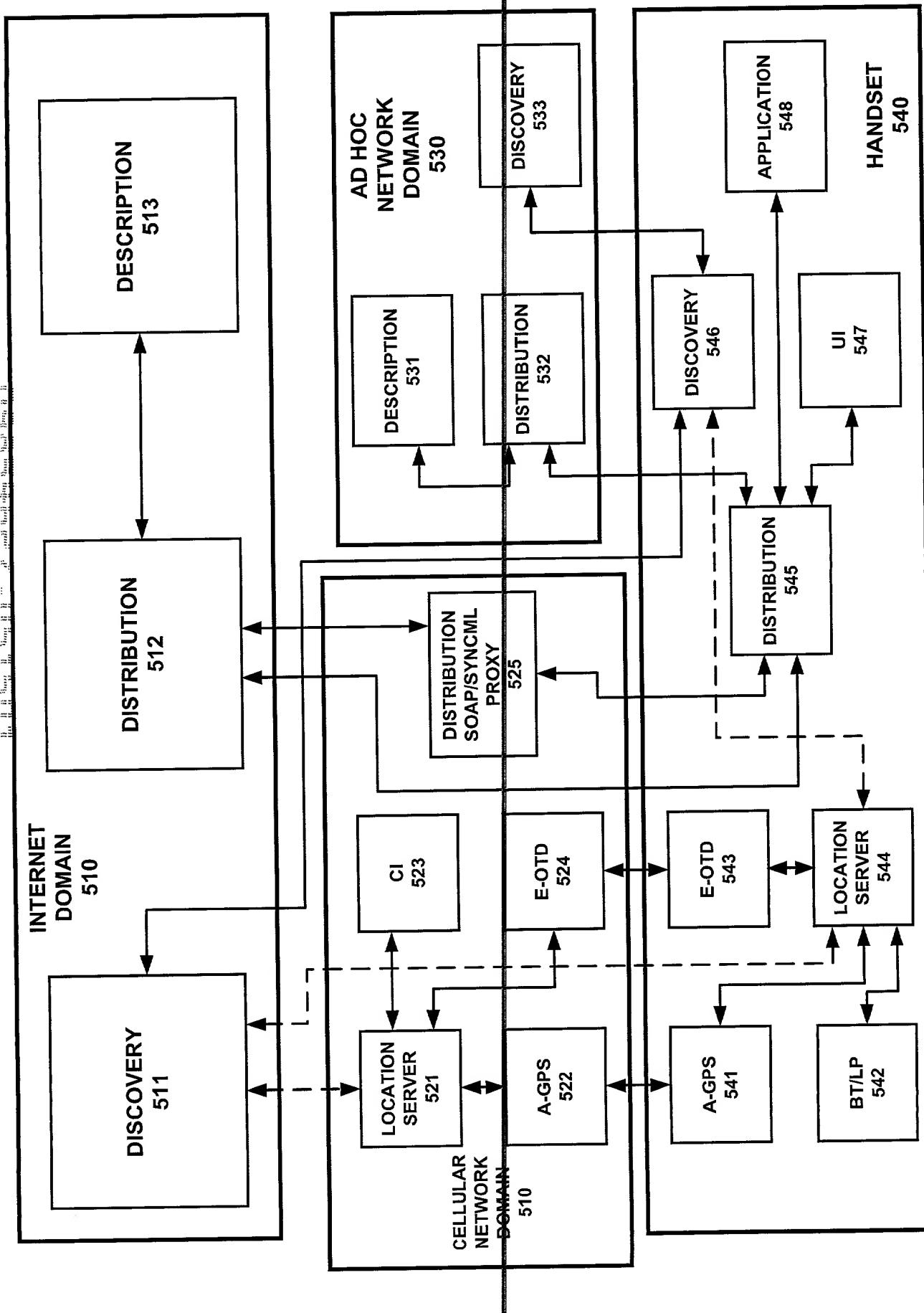


FIG. 4A



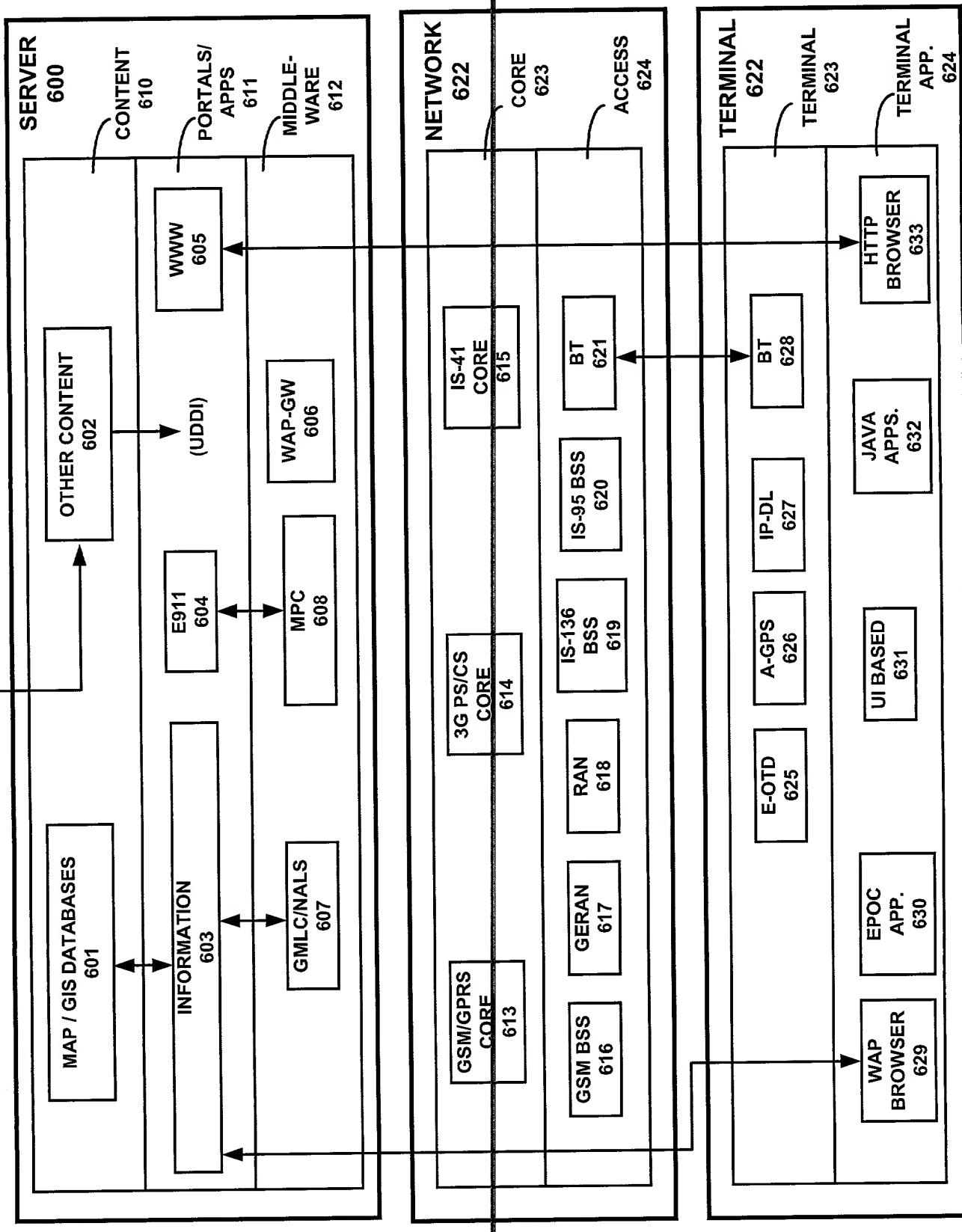
**FIG. 4B**





5  
FIG.

JUHANI MURTO AND MIKKO OLKKONEN  
 SERVICE DISCOVERY ACCESS TO USER LOCATION  
 28464 (4208-4010)

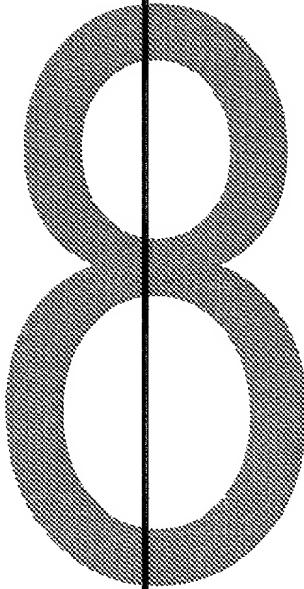


**FIG. 6**

UNITED STATES PATENT AND TRADEMARK OFFICE  
DOCUMENT CLASSIFICATION BARCODE SHEET



# Oath/Declaration, Small Entity, and Power of Attorney



Level - 2  
Version 1.1

**COMBINED DECLARATION AND POWER OF ATTORNEY FOR  
ORIGINAL, DESIGN, NATIONAL STAGE OF PCT, SUPPLEMENTAL,  
DIVISIONAL, CONTINUATION OR CONTINUATION-IN-PART APPLICATION**

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name,

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

**SERVICE DISCOVERY ACCESS TO USER LOCATION**

the specification of which

- a.  is attached hereto
- b.  was filed on \_\_\_\_\_ as application Serial No. \_\_\_\_\_ and was amended on \_\_\_\_\_. (if applicable).

**PCT FILED APPLICATION ENTERING NATIONAL STAGE**

- c.  was described and claimed in International Application No. \_\_\_\_\_ filed on \_\_\_\_\_ and as amended on \_\_\_\_\_. (if any).

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 C.F.R. § 1.56.

I hereby specify the following as the correspondence address to which all communications about this application are to be directed:

SEND CORRESPONDENCE TO:

John E. Hoel  
MORGAN & FINNEGAN, L.L.P.  
345 Park Avenue  
New York, N.Y. 10154

DIRECT TELEPHONE CALLS TO: 202-857-8021

I hereby claim foreign priority benefits under Title 35, United States Code § 119 (a)-(d) or under § 365(b) of any foreign application(s) for patent or inventor's certificate or under § 365(a) of any PCT international application(s) designating at least one country other than the U.S. listed below and also have identified below such foreign application(s) for patent or inventor's certificate or such PCT international application(s) filed by me on the same subject matter having a filing date within twelve (12) months before that of the application on which priority is claimed:

The attached 35 U.S.C. § 119 claim for priority for the application(s) listed below forms a part of this declaration.

Country/PCT	Application Number	Date of filing (day, month, yr)	Date of issue (day, month, yr)	Priority Claimed
				<input type="checkbox"/> Y <input type="checkbox"/> N
				<input type="checkbox"/> Y <input type="checkbox"/> N
				<input type="checkbox"/> Y <input type="checkbox"/> N

I hereby claim the benefit under 35 U.S.C. § 119(e) of any U.S. provisional application(s) listed below.

Provisional Application No.

Date of filing (day, month, yr)

**ADDITIONAL STATEMENTS FOR DIVISIONAL, CONTINUATION OR CONTINUATION-IN-PART  
OR PCT INTERNATIONAL APPLICATION(S DESIGNATING THE U.S.)**

I hereby claim the benefit under Title 35, United States Code § 120 of any United States application(s) or under § 365(c) of any PCT international application(s) designating the U.S. listed below.

US/PCT Application Serial No.	Filing Date	Status (patented, pending, abandoned)/ U.S. application no. assigned (For PCT)
-------------------------------	-------------	---

US/PCT Application Serial No.	Filing Date	Status (patented, pending, abandoned)/ U.S. application no. assigned (For PCT)
-------------------------------	-------------	---

In this continuation-in-part application, insofar as the subject matter of any of the claims of this application is not disclosed in the above listed prior United States or PCT international application(s) in the manner provided by the first paragraph of Title 35, United States Code, § 112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, § 1.56(a) which occurred between the filing date of the prior application(s) and the national or PCT international filing date of this application.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or Imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

I hereby appoint the following attorneys and/or agents with full power of substitution and revocation, to prosecute this application, to receive the patent, and to transact all business in the Patent and Trademark Office connected therewith: John C. Vassil (Reg. No. 19,098), Alfred P. Ewert (Reg. No. 19,887), David H. Pfeffer (Reg. No. 19,825), Harry C. Marcus (Reg. No. 22,390), Robert E. Paulson (Reg. No. 21,046), Stephen R. Smith (Reg. No. 22,615), Kurt E. Richter (Reg. No. 24,052), J. Robert Dailey (Reg. No. 27,434), Eugene Moroz (Reg. No. 25,237), John F. Sweeney (Reg. No. 27,471), Arnold I. Rady (Reg. No. 26,601), Christopher A. Hughes (Reg. No. 26,914), William S. Feiler (Reg. No. 26,728), Joseph A. Calvaruso (Reg. No. 28,287), James W. Gould (Reg. No. 28,859), Richard C. Komson (Reg. No. 27,913), Israel Blum (Reg. No. 26,710), Bartholomew Verdirame (Reg. No. 28,483), Maria C.H. Lin (Reg. No. 29,323), Joseph A. DeGirolamo (Reg. No. 28,595), Michael P. Dougherty (Reg. No. 32,730), Seth J. Atlas (Reg. No. 32,454), Andrew M. Riddles (Reg. No. 31,657), Bruce D. DeRenzi (Reg. No. 33,676), Mark J. Abate (Reg. No. 32,527), John T. Gallagher (Reg. No. 35,516), Steven F. Meyer (Reg. No. 35,613) and Kenneth H. Sonnenfeld (Reg. No. 33,285), Tony V. Pezzano (Reg. No. 38,271), Andrea L. Wayda (Reg. No. 43,979), Walter G. Hanchuk (Reg. No. 35,179), John W. Osborne (Reg. No. 36,231), and Robert K. Goethals (Reg. No. 36,813) of Morgan & Finnegan, L.L.P. whose address is: 345 Park Avenue, New York, New York, 10154; and Michael S. Marcus (Reg. No. 31,727), John E. Hoel (Reg. No. 26,279), and Stanley B. Green (Reg. No. 24,351) of Morgan & Finnegan, L.L.P., whose address is 1775 Eye Street, Suite 400, Washington, D.C. 20006.

I hereby authorize the U.S. attorneys and/or agents named hereinabove to accept and follow instructions from \_\_\_\_\_ as to any action to be taken in the U.S. Patent and Trademark Office regarding this application without direct communication between the U.S. attorneys and/or agents and me. In the event of a change in the person(s) from whom instructions may be taken I will so notify the U.S. attorneys and/or agents named hereinabove.

Full name of sole or first inventor Juhani Murto

Inventor's signature\*

date

Residence: Orapihlajatie 13 A, 00320, Helsinki, Finland

Citizenship: Finland

Post Office Address: Orapihlajatie 13 A, 00320, Helsinki, Finland

Full name of second inventor Mikko Olkkonen

Inventor's signature\*

date

Residence: Kanervamaäentie 6, 02400, Kirkkonummi, Finland

Citizenship: Finland

Post Office Address: Kanervamaentie 6, 02400, Kirkkonummi, Finland

ATTACHED IS ADDED PAGE TO COMBINED DECLARATION AND POWER OF ATTORNEY FOR SIGNATURE BY THIRD AND SUBSEQUENT INVENTORS FORM.

\* Before signing this declaration, each person signing must:

1. Review the declaration and verify the correctness of all information therein; and
2. Review the specification and the claims, including any amendments made to the claims.

After the declaration is signed, the specification and claims are not to be altered.

To the inventor(s):

The following are cited in or pertinent to the declaration attached to the accompanying application:

**Title 37, Code of Federal Regulation, §1.56**

Duty to disclose information material to patentability

(a) A patent by its very nature is affected with a public interest. The public interest is best served, and the most effective patent examination occurs when, at the time an application is being examined, the Office is aware of and evaluates the teachings of all information material to patentability. Each individual associated with the filing and prosecution of a patent application has a duty of candor and good faith in dealing with the Office, which includes a duty to disclose to the Office all information known to that individual to be material to patentability as defined in this section. The duty to disclose information exists with respect to each pending claim until the claim is canceled or withdrawn from consideration, or the application becomes abandoned. Information material to the patentability of a claim that is canceled or withdrawn from consideration need not be submitted if the information is not material to the patentability of any claim remaining under consideration in the application. There is no duty to submit information which is not material to the patentability of any existing claim. The duty to disclose all information known to be material to patentability is deemed to be satisfied if all information known to be material to patentability of any claim issued in a patent was cited by the Office or submitted to the Office in the manner prescribed by §§1.97(b)-(d) and 1.98. However, no patent will be granted on an application in connection with which fraud on the Office was practiced or attempted or the duty of disclosure was violated through bad faith or intentional misconduct. The Office encourages applicants to carefully examine:

- (1) prior art cited in search reports of a foreign patent office in a counterpart application, and
- (2) the closest information over which individuals associated with the filing or prosecution of a patent application believe any pending claim patentably defines, to make sure that any material information contained therein is disclosed to the Office.

**Title 35, U.S. Code § 101**

Inventions patentable

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

## Title 35 U.S. Code § 102

Conditions for patentability; novelty and loss of right to patent

A person shall be entitled to a patent unless --

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for patent,
- (b) the invention was patented or described in a printed publication in this or foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States, or
- (c) he has abandoned the invention, or
- (d) the invention was first patented or caused to be patented, or was the subject of an inventor's certificate, by the applicant or his legal representatives or assigns in a foreign country prior to the date of the application for patent in this country on an application for patent or inventor's certificate filed more than twelve months before the filing of the application in the United States, or
- (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent, or
- (f) he did not himself invent the subject matter sought to be patented, or
- (g) before the applicant's invention thereof the invention was made in this country by another who had not abandoned, suppressed, or concealed it. In determining priority of invention there shall be considered not only the respective dates of conception and reduction to practice of the invention, but also the reasonable diligence of one who was first to conceive and last to reduce to practice, from a time prior to conception by the other .

## Title 35, U.S. Code § 103

Conditions for patentability; non-obvious subject matter

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

**Title 35, U.S. Code § 112 (in part)**

Specification

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor of carrying out his invention.

**Title 35, U.S. Code, § 119**

Benefit of earlier filing date in foreign country; right of priority

An application for patent for an invention filed in this country by any person who has, or whose legal representatives or assigns have, previously regularly filed an application for a patent for the same invention in a foreign country which affords similar privileges in the case of applications filed in the United States or to citizens of the United States, shall have the same effect as the same application would have if filed in this country on the date on which the application for patent for the same invention was first filed in such foreign country, if the application in this country is filed within twelve months from the earliest date on which such foreign application was filed; but no patent shall be granted on any application for patent for an invention which had been patented or described in a printed publication in any country more than one year before the date of the actual filing of the application in this country, or which had been in public use or on sale in this country more than one year prior to such filing.

**Title 35, U.S. Code, § 120**

Benefit or earlier filing date in the United States

An application for patent for an invention disclosed in the manner provided by the first paragraph of section 112 of this title in an application previously filed in the United States, or as provided by section 363 of this title, which is filed by an inventor or inventors named in the previously filed application shall have the same effect, as to such invention, as though filed on the date of the prior application, if filed before the patenting or abandonment of or termination of proceedings on the first application or an application similarly entitled to the benefit of the filing date of the first application and if it contains or is amended to contain a specific reference to the earlier filed application.

Please read carefully before signing the Declaration attached to the accompanying Application.

If you have any questions, please contact Morgan & Finnegan, L.L.P.